

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/595,790	KSHIRSAGAR ET AL.
	Examiner	Art Unit
	Rita J. Desai	1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 February 2010.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 2,4,5,14,19-29,35-49,65 and 66 is/are pending in the application.  
 4a) Of the above claim(s) 36-38 and 66 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 2, 4, 5, 14, 19-29, 35, 39-49 and 65 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date, <u>5/7/10</u> .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

Claims 2, 4, 5, 14, 19-29, 35-49, 65, and 66 are pending and under consideration.

Claims 36-38 and 66 are withdrawn from consideration.

Claim 66 was inadvertently included in the rejection but it being a method claims should have been in the withdrawn claims.

Response to the arguments:-

The rejection of the claims 2, 4, 5, 14, 19-29, 35, 39-49 and 65 under 35 USC 112 still stands.

Applicants argue that the schemes on pages 74-104 pages 110-166 .

The examiner agrees that some compounds are indeed made and that there is some data with respect to some compounds.

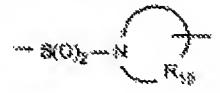
Applicants are allowed to have some inoperative embodiments , however the catch phrase here is some. "Some " cannot be 90% of the scope.

$R_3$  is selected from the group consisting of:

- Z-R<sub>4</sub>,
- Z-X'-R<sub>4</sub>,
- Z-X'-Y-R<sub>4</sub>, and
- Z-X'-Y-X'-Y-R<sub>4</sub>, and
- Z-X'-R<sub>5</sub>;

$Y'$  is selected from the group consisting of:

- a bond,
- C(O)-,
- C(S)-,
- S(O)<sub>2</sub>-,
- S(O)<sub>2</sub>-N(R<sub>8</sub>)-,



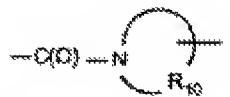
- C(O)-O-,
- C(O)-N(R<sub>8</sub>)-,
- C(S)-N(R<sub>8</sub>)-,

The various R<sub>3</sub>, R<sub>4</sub> substituents to be

-C(O)-N(R<sub>8</sub>)-S(O)<sub>2</sub>-;

-C(O)-N(R<sub>8</sub>)-C(O)-;

-C(S)-N(R<sub>8</sub>)-C(O)-;



-C(O)-C(O)-;

-C(O)-C(O)-O-, and

-O(=NH)-N(R<sub>8</sub>)-;

R<sub>1</sub> is selected from the group consisting of:

-R<sub>4</sub>,

-X'-R<sub>3</sub>,

-X'-Y'-R<sub>3</sub>,

-X'-Y-X'-Y-R<sub>4</sub>, and

-X'-R<sub>4</sub>(L);

~~X'-O-NR<sub>4</sub>'-X'-R<sub>3b</sub>~~ and

~~X'-O-N=C(R<sub>3b</sub>)(R<sub>3c</sub>)~~

R<sub>1a</sub>, R<sub>1b</sub>, R<sub>1c</sub>, R<sub>1d</sub>, R<sub>1e</sub>, R<sub>2</sub>[[L]] and R<sub>2s</sub> are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

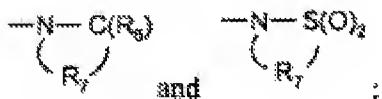
heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

or R<sub>1a</sub> and R<sub>1b</sub> and/or R<sub>2</sub> and R<sub>2s</sub> together with the nitrogen atom and Y' to which they are bonded can join to form a ring selected from the group consisting of:



Further applicants definition with X' being

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more -O- groups; □

Alkylene , arylene , heteroarelene and so on, optionally interrupted by O or arylene and then further terminated by arylene.

It is not clear which group is included and which is not .

In re Wiggins 179 USPQ 421 that "It must also be noted that the claim terminology is so broad that it does not even require that the heterocyclic group contain a carbon atom. Heterocyclic ring systems containing phosphorus, boron, silicon, and other elements in addition to nitrogen and oxygen without the inclusion of carbon atoms are well-known and could not be expected to produce compounds having the properties herein claimed."

See also: *Schering Corporation v. Gilbert et al.*, 68 USPQ 84 (2d Cir. 1946)

It was shown in evidence and by way of admissions elicited by the defendants from the plaintiff before trial that one skilled in the art of organic chemistry may start in the group of the acetic acid radical and the radicals of homologues of acetic acid to which the patent relates, for instance, with the simple hydrocarbon called methane and theoretically progress along the series in the general group called alkanes from one substance to another by increasing the size of the molecules in steps of one carbon atom and two hydrogen atoms. At least formulas for such substances, as well as for others, can be written in an indefinite chain. Also it was shown that for the hydrogen atoms of the alkane molecules the atoms of what are called halogens may be substituted and so may the atoms of other groups including the residue of the hydrocarbon benzene. The latter is represented in chemical formulas by a hexagon which is called the benzene ring and, as changes in the atomic structure of the molecule occur, the ones introduced take varying positions within the ring which positions determine the nature of the compound. Theoretically a multitude of substances not as yet found in nature and not as yet compounded could be synthesized, if skilled organic chemists were given the time and materials with which to work, and actually the formulas for them could be written. There is, however, a practical limit upon synthesis, though the extent of that is not fully known, for some of the new theoretical compounds might be impossible to create, and some would be so unstable that they would

disintegrate either at once or in short periods of varying length. Moreover, while analogy is at times useful, organic chemistry is essentially an experimental science and results are often uncertain, unpredictable and unexpected.

See *Ex parte Herzog, Hershberg, and Coan*, 115 USPQ 195 (Bd. Pat. App. & Int. 1956)

affirming the examiner, and stating:

"it becomes obvious that the expressions defining the organic acids used.....are inclusive of inoperative materials and go far beyond the adequately disclosed subject matter of the specification."

And *Nationwide Chemical Corporation, et al. v. Wright, et al.*, 192 USPQ 95 (M.D. Fla. 1976)

"with respect to generic claims to chemical and biological inventions, the scope of the claims is limited to what those skilled in the art could reasonably predict from the inventor's disclosure. This precept recognizes that one skilled in these chemical and biological arts cannot always reasonably predict how different chemical compounds and elements might behave under varying circumstances. Thus, in so-called "chemical" patent law practice, the claims of a patent are limited by the scope of what the disclosure reasonably teaches to one skilled in the art."

*In re Prutton*, 96 USPQ 147 (C.C.P.A. 1952)

"The complete list of organic compositions includes, in generic form, most of the organic compounds found discussed in ordinary textbooks of organic chemistry..... It appears to be appellant's view that a selection of an unsaturated hydrocarbon from the first list and of a sulphide of phosphorus from the second list will provide support for the claims here under discussion. The Examiner holds, and properly we think, that the presentation of such lists from which reagents may be selected is not a sufficient disclosure to support claims to a particular class of reaction product which might be produced by proper selection of reagents and determining the conditions of reaction."

*In re Walker*, 22 USPQ (C.C.P.A. 1934)

"It is true, as argued by counsel, that appellant is entitled to claim not only the substance enumerated by him in his specification, but also their equivalents. However, in cases of this character, involving chemicals and chemical compounds, many of which of course differ radically in their properties, it must appear in the specification, either by the enumeration of a sufficient number of the members of a group or by other appropriate language, that "the chemicals or chemical combinations included therein were generally capable of accomplishing the desired result." See *In re Ellis*, 37 App. D. C. 203; *In re Dosselman*, 37 App. D. C. 211; *In re*

*Langmuir*, 20 C. C. P. A. (Patents) 733, 62 F. (2d) 93.”

*In Re Sus and Schaefer* 134 USPQ 1962 301-310 (*affirmed*):

“It is, however, consistent with this public purpose embodied in the pertinent statutory requirement that the *invention claimed* shall be no broader than the *invention set forth* in the written description forming a part of the specification.....thus it seems to us that one killed in this art would not be taught by written description of the invention in the specification that any 'aryl or substituted aryl radical' would be suitable for the purposes of the invention but rather that only *certain aryl radicals* and certain specifically substituted aryl radicals would be suitable for such purposes.”

The rejection under 35 USC 103 has been withdrawn as applicants have provided a declaration.

The ODP rejections over 11/595058, 10/595065, 10/595058 , 11/884153, 10/595792 still stand as applicants have not presented any convincing arguments nor a TD. A provisional rejection is still a rejection . It is called provisional because the copending application is still not patented.

### ***Conclusion***

Claims 2, 4, 5, 14, 19-29, 35, 39-49 and 65 are rejected.

Claims 36-38 and 66 are withdrawn.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita J. Desai whose telephone number is 571-272-0684. The examiner can normally be reached on Monday - Friday, flex time..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rita J. Desai/  
Primary Examiner, Art Unit 1625

May 6, 2010.